

### **AMENDMENTS TO THE CLAIMS**

*The listing of claims will replace all prior versions and listings of claims in the application:*

#### **Listing of Claims:**

1-2. **(Cancelled)**

3. **(Currently Amended)** A planar optical circuit, comprising:  
at least one monolithic or hybrid integrated optical component associated with a generally planar substrate, the optical component having an output port;  
a waveguide structure configured to transfer an optical signal associated with the optical component; and  
a scattered light system operable to influence a propagation of scattered light from the output port of the optical component in a targeted manner, the scattered light system integrated into the generally planar substrate, wherein the scattered light system comprises an additional waveguide, one end of which is arranged in the vicinity of the output port of the optical component. ~~a scattered light source.~~

4. **(Original)** The circuit of claim 3, wherein the optical component comprises a Mach-Zehnder interferometer with an input port and an output port, and wherein the additional waveguide is arranged in the vicinity of the output port of the Mach-Zehnder interferometer.

5. **(Original)** The circuit of claim 4, wherein the additional waveguide is arranged in a substantially symmetrical arrangement in the region of the output port on both sides of the output waveguide of the Mach-Zehnder interferometer.

6. **(Original)** The circuit of claim 3, wherein the additional waveguide extends in a bent or an S-shaped fashion.

7. **(Original)** The circuit of claim 6, wherein additional waveguide comprises:

- a first, straight region that extends substantially parallel to the waveguide structure; and
- an S-shaped region that adjoins the first straight region.

8. **(Original)** The circuit of claim 3, further comprising a photodiode, wherein an other end of the additional waveguide is terminated by the photodiode.

9. **(Original)** The circuit of claim 8, further comprising an evaluation unit, wherein the photodiode is coupled to the evaluation unit, and wherein the evaluation unit indirectly determines the optical power of the signal at the output of the optical component using the detected scattered light.

10. **(Previously Presented)** A planar optical circuit, comprising:  
at least one monolithic or hybrid integrated optical component associated with a generally planar substrate;  
a waveguide structure configured to transfer an optical signal associated with the optical component; and  
a scattered light system operable to influence a propagation of scattered light from the optical component in a targeted manner, the scattered light system integrated into the generally planar substrate so as to be at least partially coplanar with the waveguide structure, wherein the scattered light system comprises a scattered light-absorbing structure associated with the generally planar substrate.
11. **(Original)** The circuit of claim 10, wherein the scattered light-absorbing structure comprises a trench within the generally planar substrate, wherein the trench is filled with a light absorbent substance.
12. **(Original)** The circuit of claim 11, further comprising a plurality of waveguides, and further comprising a plurality of trenches as light-absorbing structures arranged and extending generally parallel to and between the plurality of waveguides, respectively.
13. **(Previously Presented)** The circuit of claim 3, wherein the scattered light system comprises a scattered light-reflecting structure associated with the generally planar substrate.
14. **(Original)** The circuit of claim 13, wherein the scattered light-reflecting structure comprises a trench within the generally planar substrate.

15. **(Previously Presented)** A planar optical circuit, comprising:  
at least one monolithic or hybrid integrated optical component associated with a generally planar substrate;  
a plurality of waveguides configured to transfer a plurality of optical signals associated with the optical component; and  
a scattered light system operable to influence a propagation of scattered light from the optical component in a targeted manner, the scattered light system integrated into the generally planar substrate, the scattered light system comprising a plurality of trenches as light-reflecting structures associated with the generally planar substrate, the plurality of trenches arranged and extending generally parallel to and between the plurality of waveguides, respectively.
16. **(Original)** The circuit of claim 15, wherein the plurality of waveguides each originate from a Mach-Zehnder interferometer, the scattered light in each case being prevented from coupling into an adjacent waveguide by the trenches extending parallel thereto.
17. **(Original)** The circuit of claim 16, further comprising a plurality of scattered light-detecting photodiodes, wherein each photodiode resides in a region between two neighboring trenches.
18. **(Original)** The circuit of claim 17, wherein each photodiode is coupled to an evaluation unit operable to determine the optical power at the output of a scattered light-emitting optical component using the detected scattered light.

19. **(Previously Presented)** A planar optical circuit, comprising:  
at least one monolithic or hybrid integrated optical component associated with a generally planar substrate;  
a waveguide structure configured to transfer an optical signal associated with the optical component; and  
a scattered light system operable to influence a propagation of scattered light from the optical component in a targeted manner, the scattered light system integrated into the generally planar substrate, wherein the scattered light system comprises a scattered light-reflecting structure associated with the generally planar substrate, the scattered light-reflecting structure including a trench in the generally planar substrate, wherein the trench terminates a monitoring waveguide local to the waveguide structure, and further comprising a photodiode at least partially within the trench.

20. **(Original)** The circuit of claim 19, wherein the trench of tapers substantially symmetrically in the direction of the monitoring waveguide terminated by the trench, wherein the trench comprises two side walls that run toward one another and at-which scattered light impinging from the planar optical substrate is reflected away from the trench.

21. **(Original)** The circuit of claim 19, wherein the photodiode is premounted on a submount that is placed upside down onto the generally planar optical substrate.

22. **(Canceled)**